

BW

STANFORD UNIVERSITY MEDICAL CENTER

DEPARTMENT OF GENETICS

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Dr. David E. Metzler
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Dear Dr. Metzler,

Thank you for your letter of November 1st and for showing me the galley of the final statements in your textbook. I am quite happy with the tone, substance, and form of your attributions, and if I am adding a little elaboration in this letter, it is not with the intention of urging you to change your own text.

As you know, I did indeed place a very high priority on the damping of the biological weapons arms race, and have some measured optimism that the steps like the BW disarmament treaty will play a constructive role. The condition that every scientist (which can be mapped on to every person with influence and authority) must behave in a responsible way to permit the survival of the species, is a rather severe one and I would not have put my prescriptions in quite that form. My argument that "self-inspection" could play some role in the verification of biological arms control was that eventually at least one member of the scientific community would exercise the requisite responsibility, on behalf of the whole community of man, transcending what may appear to be important but narrower interests. This is not to say that we can guarantee against any abuse of the trust and confidence that underlies the BW disarmament treaty; but rather that we can predict enough benefit and gain from it to make it worthwhile to take the risks of compliance. The primary responsibility of the humane scientist would be to help assure that his own country did not secretly attempt to evade its legal obligations under the treaty. There is perhaps another and more pervasive responsibility: and that is to be well informed about the global scientific effort, and to be prepared to avoid hysterical misjudgment about the implications of particular developments. I was quite astonished that many of my colleagues at the Asilomar Conference last year were quite ignorant of the terms of the BW treaty, and were making remarks about the potential applications of recombinant-DNA-research in this country that must have seemed quite alarming to outsiders. For example, at the recent session of the Disarmament Conference at Geneva, Ambassador Martin felt it necessary to make a speech reassuring diplomats from other countries that the United States indeed did interpret the BW treaty to embrace the technology of recombinant DNA! Well, this will have done no harm, unless it convinces scientists in other countries that we are hiding programs here in violation of the treaty, which will hardly encourage their scientists to be forthcoming about developments within their own purview.

The essential condition for relying upon the scientific system, as an alternative to the international political one, is free and open communication among its members; I am not sure that we can rejoice in the present status of this particular problem.

If I may turn to just one other point in your own discussion, it is your reference to the opportunity for ethnically selective warfare: "insidious attacks on unvaccinated persons or persons of other races". I think you should footnote that the underlying assumption behind that prospect is the discovery of a simple biochemical-genetic differential that would reliably categorize different "races". This entails a tacit acceptance of a genetic definition of the distinction of races, that I think you would want to give more thought to. Unless you mean to use melanin itself as the marker and fantasize an attack by a racially homogeneous country like Japan, on say Burundi, I would find it hard to imagine a context where this kind of weapon would afford any advantages to a militarily competent power. Of course, I am belaboring a very small point, but I was quite upset at one time when, in the name of "scientific conscience", I had to witness an attack on a competent and productive worker in the field of blood group population genetics in Taiwan that implied that he was laying the groundwork for ethnic biological warfare!

Sincerely yours,

Joshua Lederberg
Professor of Genetics

JL/rr